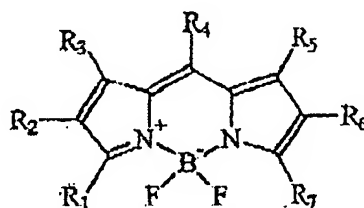


## CLAIMS

What is claimed is:

1. A method for the detection of leakage in lubricant systems comprising the steps of: marking a lubricant with a fluorescent dye based on pyrromethene difluoroborate complexes having the general formula (I)

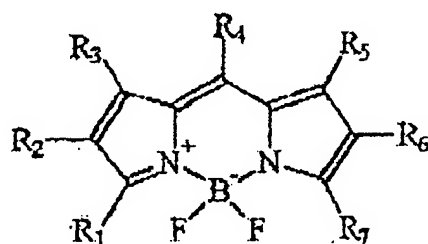


(I)

where R1, R2, R3, R5, R6 and R7 are independently hydrogen or straight-chain or branched-chain C1-C4-alkyl radicals or the R1 and R2 and the R6 and R7 pairs are part of a fused aromatic ring system and R4 is a straight-chain or branched-chain C1-C10-alkyl radical, and detecting the fluorescence by detection means.

2. The method according to claim 1, wherein the fluorescent dye based in pyrromethene difluoroborate complexes having the general formula (I) has been dissolved in octanoic acid.

3. The method according to claim 1, wherein the fluorescent dye based on pyrromethene difluoroborate complexes having the general formula (I) 4,4-difluoro-2,6-diethyl-1,3,5,7-tetramethyl-8-heptyl-4-bora-3a,4a-diaza-s-indacene is selected.
4. A fluorescent dye concentrate comprising at least one fluorescent dye based on pyrromethene difluoroborate complexes having the general formula (I)



(I)

where R1, R2, R3, R5, R6 and R7 are independently hydrogen or straight-chain or branched-chain C1-C4-alkyl radicals or the R1 and R2 and the R6 and R7 pairs are part of a fused aromatic ring system and R4 is a straight-chain or branched-chain C1-C10 alkyl radical, and octanoic acid solvent.

5. The fluorescent dye concentrate according to claim 4, herein the concentration ratio of the fluorescent dye dissolved in octanoic acid is in

the range from 150 g of the fluorescent dye in 100 g of octanoic acid to 350 g of the fluorescent dye in 100 g of octanoic acid.

6. The fluorescent dye concentrate according to claim 4, wherein the fluorescent dye based on pyrromethene difluoroborate complexes having the general formula (I) 4,4-difluoro-2,6-diethyl-1,3,5,7-tetramethyl-8-heptyl-4-bora-3a,4a-diaza-s-indacene is selected.